

## EAST Search History

## EAST Search History (Prior Art)

| Ref # | Hits | Search Query   | DBs                                | Default Operator | Plurals | Time Stamp       |
|-------|------|--|------------------------------------|------------------|---------|------------------|
| L1    | 30   | (148/418.ccls. or 420/535,549.ccls.) and (si or silicon) and (cu or copper) and (ni or nickel) and (ca or calcium)   | US-PGPUB; USPAT; EPO; JPO; DERVENT | OR               | OFF     | 2009/10/27 11:50 |
| L2    | 145  | (148/418.ccls. or 420/534,535,537,548,549.ccls.) and (si or silicon) and (cu or copper) and (ni or nickel) and (fe or iron) and (ti or titanium) and (phosphorus or P)   | US-PGPUB; USPAT; EPO; JPO; DERVENT | OR               | OFF     | 2009/10/27 11:50 |
| L3    | 119  | L2 and (v or vanadium or zr or zirconium)  | US-PGPUB; USPAT; EPO; JPO; DERVENT | OR               | OFF     | 2009/10/27 11:50 |
| L4    | 836  | ((al or aluminum or aluminium) near3 (alloy or alloys or base or based or balance)).ab. and (si or silicon) and (cu or copper) and (ni or nickel) and (fe or iron) and (ti or titanium) and (phosphorus or P) and (v or vanadium) and (zr or zirconium) not L3 | US-PGPUB; USPAT; EPO; JPO; DERVENT | OR               | OFF     | 2009/10/27 11:50 |
| L5    | 145  | (148/415-418.ccls. or 420/534,535,537,548,549.ccls.) and (si or silicon) and (cu or copper) and (ni or nickel) and (fe or iron) and (ti or titanium) and (phosphorus or P)   | US-PGPUB; USPAT; EPO; JPO; DERVENT | OR               | OFF     | 2009/10/27 11:50 |
| L6    | 119  | L5 and (v or vanadium or zr or zirconium)  | US-PGPUB; USPAT; EPO; JPO; DERVENT | OR               | OFF     | 2009/10/27 11:50 |
| L7    | 209  | IKUNO-HAJIME\$.in. SUGIMOTO-YOSHIHIKO\$.in. HOHOJO-HIROSHI\$.in.   | US-PGPUB; USPAT; EPO; JPO; DERVENT | OR               | OFF     | 2009/10/27 12:00 |
| L8    | 12   | 7 and ((al or aluminum or aluminium) near3 (alloy or alloys or base or based or balance)) and (si or silicon) and (cu or copper) and (ni or nickel) and (fe or iron) and (ti or titanium)  | US-PGPUB; USPAT; EPO; JPO; DERVENT | OR               | OFF     | 2009/10/27 12:00 |
| L9    | 127  | (148/549,700.ccls. or 420/551.ccls.) and (si or silicon) and (cu or copper) and (ni or nickel) and (fe or iron) and (ti or titanium) and (mg or magnesium)   | US-PGPUB; USPAT; EPO; JPO; DERVENT | OR               | OFF     | 2009/10/27 13:23 |
| L10   | 17   | 9 and (v or vanadium or zr or zirconium) and (ca or calcium) and (p or phosphorus)   | US-PGPUB; USPAT; EPO; JPO; DERVENT | OR               | OFF     | 2009/10/27 13:23 |
| L11   | 0    | (08/032437).APP.   | US-PGPUB; USOOR                    | OR               | OFF     | 2009/10/27 13:27 |

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|-----|----|--|------------------------------------|----|-----|------------------|
| L12 | 24 | (148/549,700,418.ccls. or 420/551,535,549.ccls.) and (si or silicon) and (cu or copper) and (ni or nickel) and (fe or iron) and (ti or titanium) and (mg or magnesium) and (v or vanadium) and (mn or manganese) and (zr or zirconium) and (ca or calcium) and (p or phosphorus) | US-PGPUB; USPAT; EPO; JPO; DERVENT | OR | OFF | 2009/10/27 13:35 |
|-----|----|--|------------------------------------|----|-----|------------------|

## EAST Search History (Interference)

| Ref # | Hits | Search Query  | DBs         | Default Operator | Plurals | Time Stamp       |
|-------|------|---|-------------|------------------|---------|------------------|
| L13   | 16   | (148/549,700,418.ccls. or 420/551,535,549.ccls.) and (si or silicon) and (cu or copper) and (ni or nickel) and (fe or iron) and (ti or titanium) and (mg or magnesium) and (v or vanadium) and (mn or manganese) and (zr or zirconium) and (ca or calcium) and (p or phosphorus)                                    | USPAT; UPAD | OR               | OFF     | 2009/10/27 13:38 |
| L14   | 2    | (148/549,700,418.ccls. or 420/551,535,549.ccls.) and (si or silicon) and (cu or copper) and (ni or nickel) and (fe or iron) and (ti or titanium) and (mg or magnesium) and (v or vanadium) and (mn or manganese) and (zr or zirconium) and (ca or calcium) and (p or phosphorus)                                    | UPAD        | OR               | OFF     | 2009/10/27 13:38 |
| L15   | 71   | ((al or aluminum or aluminium) near2 (alloy or alloys or base or based or balance)) and (si or silicon) and (cu or copper) and (ni or nickel) and (fe or iron) and (ti or titanium) and (mg or magnesium) and (v or vanadium) and (mn or manganese) and (zr or zirconium) and (ca or calcium) and (p or phosphorus) | UPAD        | OR               | OFF     | 2009/10/27 13:39 |

10/27/09 1:42:08 PM

C:\Documents and Settings\jmorillo\My Documents\EAST\Workspaces\alloys\Al Si\high Si (hypo, eutectic, hyper)\Al Si 10 to 21 casting alloy for piston w Cu Ni etc 10 620388.wsp